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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/715,031

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LeNoir E. Zaiser

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EXAMINER

DIXON, ANNETTE FREDRICKA

ART UNIT

PAPER NUMBER

3771

NOTIFICATION DATE

DELIVERY MODE

08/30/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No. 10/715,031	Applicant(s) E. ZAISER ET AL.	
	Examiner Annette F. Dixon	Art Unit 3771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-8 and 10-62 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-8 and 10-62 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is in response to the amendment filed on June 8, 2010. Examiner acknowledges claims 1, 3-8, 10-62 are pending in this application, with claims 5, 12, 15, 24, 29, 31, 38, 44, 50, and 56 having been currently amended, claims 61 and 62 having been newly added, and claims 2 and 9 having been cancelled.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 5, 6, 8, 12, 13, and 49-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davidson (5,785,050) and Bickford (3,630,438).

As to Claims 1, 8, 31, 49, 55, 61 and 62, Davidson discloses an outer body (17), an inner cavity (the space between the beginning of the orifice 11 and the threaded region 21), bounded by the inner wall of the outer body (17), the inner wall having an orifice (11, defined by the pathway of gas from the beginning of element 11 to the outlet at 65) extending through the outer body (17); an inner element (the combination of 20 and 60) within the inner cavity (the space between the beginning of the orifice 11 and the threaded region 21) having an external wall with a coupling feature (threads 21) the coupling feature aligned with the orifice (11, defined by the pathway of gas from the

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beginning of element 11 to the outlet at 65) and gas fitting (65) extending through the orifice (11, defined by the pathway of gas from the beginning of element 11 to the outlet at 65) and engaged with the inner element (the combination of 20 and 60) via the coupling feature (threads, 21, Figure 1). Regarding independent claims 1, 31, and 49 only, with respect to Applicant's use of the phrase "being of a material different from the first material", it is noted that this recitation within the claims is directed to a process. Since the claim is an apparatus/product claim, patentable weight is only given to the end product. "Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is in the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Further, as indicated by the threaded connection 21 between elements outer body (17) and the inner body (20), the valve is made of two separate and distinct parts. Yet Davidson does not expressly disclose the materials of construction are separate. Bickford teaches a valve (105) having two separate parts (115) and (117) wherein the valve portion 117 is seated inside of valve portion 115 and are made of separate materials for the purpose of providing a valve able to accommodate environmental changes (such as thermal expansion) (Column 3, Line 67 thru Column 4, Line 30). Therefore, it would have been obvious to one having ordinary skill in the art to modify the material composition of the

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valve of Davidson to include different material compositions as taught by Bickford to enable the valve to compensate for environmental changes in temperature.

As to Claims 5, 12, 50, 56, and 57, Davidson discloses the use of threads (21 and 22) as coupling features.

As to Claims 6, 13, and 37, Davidson discloses the use of a shuttle (40) to reduce the pressure within the inner element (Figures 1-3) and a flow meter assembly (60).

As to Claims 54, and 60, Davidson discloses a hose connector fitting (29).

As to Claim 51, Davidson discloses the flow meter (60) is mated with a threaded connection (Figure 1).

As to Claims 52, 53, 58, and 59, Davidson discloses a yoke having a T-handle associated with the outer body (the portion of the device receiving threaded region 12).

4. Claims 7, 14-18, 20, 21, 24-26, 30-33, 35, 36, 38-41, 43-46, and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davidson (5,785,050) and Bickford (3,630,438), as applied to claims 1 and 8, and further in view of Collins et al. (4,064,890).

As to Claims 7, 14, 15, 21, 26, 31, 38, and 44, the modified Davidson as disclosed in claims 1 and 8, discloses a valve having an outer body made of a material different than the inner body, where the outer body is made of a metal and the inner body is made of an elastomeric material. Yet the modified Davidson does not disclose

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or teach the relationship between the material composition of the valve and the ignition point. Collins teaches a valve having two material compositions of an elastomeric material and a metal, wherein the metal resists ignition and thus has a lower ignition point than the elastomeric material which is more readily ignited, thus having a higher ignition point. Collins teaches the purpose of this material construction is to prevent secondary reactions from high pressure oxygen passing thru the valve based on the failure of the elastomeric material and while still enabling the valve to retard oxygen flow. Therefore, it would have been obvious to one having ordinary skill in the art to modify the material composition of the modified Davidson to include the ignition points of the material composition, as taught by Collins to prevent secondary reactions while maintaining valve operation.

As to Claims 16, and 39, Davidson discloses a hose connector fitting (29).

As to Claims 17, 32, 40, and 45, Davidson discloses a pressure gauge (15).

As to Claims 18, 33, 41, and 46, Davidson discloses a check valve (30).

As to Claims 20, 24, 29, 35, 43, and 48, Davidson discloses the use of threads (21 and 22) as coupling features.

As to Claims 25, 30, and 36, Davidson discloses the use of a shuttle (40) to reduce the pressure within the inner element (Figures 1-3) and a flow meter assembly (60).

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5. Claims 3, 4, 10, 11, 19, 22, 23, 27, 28, 34, 42, and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davidson (5,785,050) and Bickford (3,630,438), as applied to claim 1, 8, 15, 21, 26, 31, 38, and 44, and further in view of Chu (5,860,447).

The modified Davidson discloses a valve having an outer body made of a first and an inner body made of a second material, wherein both the first and second materials are different, yet does not expressly disclose suitable material choices. Chu teaches a plethora of suitable materials (aluminum, steel, brass, bronze, or strong plastic, Column 4, Lines 38-40 and 64-67) in pressure regulators (valves) which are alternative materials of construction selected based upon the ability of the material to withstand environmental factors such as pressure and friction. Therefore it would have been obvious to modify the material composition of the modified Davidson to include an alternative construction material as taught by Chu to be a material capable of withstanding environmental changes.

Response to Arguments

6. Applicant's arguments, June 8, 2010, have been fully considered but they are not persuasive. Applicant asserts the prior art made of record does not disclose or teach the embodiment of Figure 7 having a gas fitting extending through the orifice and engaged with the inner element via the coupling feature. Examiner respectfully disagrees.

First, it is noted that Applicant has utilized Figure 7 to distinguish between the prior art made of record and the instant invention. However, Examiner notes the features of Figure 7 (both gas fittings, 40 and 50) are missing from the claims as filed. Applicant is reminded, although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). In this case, there is no recitation of both fitting engaging the inner elements of the orifice, as seen in Figure 7. Should Applicant be interested in the embodiment of Figure 7, Applicant is required to expressly recite claim limitations within the claim listing.

Secondly, the Davidson reference does disclose a gas fitting extending through the orifice and engaged with the inner element via the coupling feature. As seen in Figure 1, a gas fitting (65) extending through the orifice (11, defined by the pathway of gas from the beginning of element 11 to the outlet at 65) and engaged with the inner element (the combination of 20 and 60) via the coupling feature (threads, 21). Consequently, Davidson meets the limitations of the instant claims as filed, and is remarkably similar to the Applicant argued, Figure 7, despite the recitation of the features of the second gas fitting (50).

Therefore, in light of the aforementioned reasoning the non-final rejection of the claims has been maintained and made final.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Annette F. Dixon whose telephone number is (571) 272-3392. The examiner can normally be reached on Monday thru Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine Yu can be reached on (571) 272-4835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Annette F Dixon
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Art Unit 3771

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